Chapter 5

English Words and Sentences

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1. The form in which a word is pronounced when it is considered in isolation is called its **citation form**. At least one syllable is fully stressed and has no reduction of the vowel quality.

2. There is a **strong form**, which occurs when the word is stressed, as in sentences such as "I want money and happiness, not money or happiness." There is also a **weak form**, which occurs when the word is in an unstressed position.

<table>
<thead>
<tr>
<th>Word</th>
<th>Strong form</th>
<th>Weak form</th>
<th>Example of a weak form</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>ə</td>
<td>ø</td>
<td>a cup [əˈkʌp]</td>
</tr>
<tr>
<td>and</td>
<td>ænd</td>
<td>ænd, ðænd, ən, ðən, əŋ, ðəŋ</td>
<td>you and me ['ju ən 'mi]</td>
</tr>
<tr>
<td>as</td>
<td>æz</td>
<td>əz</td>
<td>as good as [əz ˈgud əz]</td>
</tr>
<tr>
<td>at</td>
<td>æt</td>
<td>ət</td>
<td>at home [ət ˈhoum]</td>
</tr>
<tr>
<td>can</td>
<td>kæn</td>
<td>kən, kən</td>
<td>I can go [aɪ kən ˈgou]</td>
</tr>
<tr>
<td>has</td>
<td>hæz</td>
<td>hæz, əz, z, s</td>
<td>he’s left [hɪz ˈlɛft]</td>
</tr>
<tr>
<td>he</td>
<td>hi</td>
<td>i, ɪ, ɪ, ɪ</td>
<td>will he go? [wɪl ɪ ˈgou]</td>
</tr>
<tr>
<td>must</td>
<td>mʌst</td>
<td>mɔst, məst, mʌst, məst</td>
<td>I must sell [aɪ mʌst ˈsɛl]</td>
</tr>
<tr>
<td>she</td>
<td>jɪ</td>
<td>jɪ</td>
<td>did she go? [dɪd jɪ ˈgou]</td>
</tr>
<tr>
<td>that</td>
<td>ðæt</td>
<td>ðæt</td>
<td>he said that it did [hɪ ˈsed ðæt ɪt ˈdɪd]</td>
</tr>
<tr>
<td>to</td>
<td>tu</td>
<td>tu, tə</td>
<td>to Mexico [tə ˌmɛksɪkəʊ]</td>
</tr>
<tr>
<td>would</td>
<td>wʊd</td>
<td>wʊd, əd, d</td>
<td>it would do [ɪ tʊd əd ˈdu]</td>
</tr>
</tbody>
</table>
1. “That” represents a demonstrative pronoun in a phrase such as "that boy and the man," but it represents a relative pronoun in "he said that men were better." Only the relative pronoun has a weak form. The demonstrative "that" is always pronounced [ðæt]. Similarly, when "has" indicates the perfect form, it may be [z], as in "she's gone," but it is [həz] or [əz] when it indicates possession, as in "she has nice eyes."

2. Weak forms and assimilations are common in the speech of every sort of speaker in both Britain and America. Foreigners who make insufficient use of them sound stilted.
1. Progressive assimilation
   look       looks
   love       loves
   like       liked
   love       loved

2. Regressive assimilation
   input      have to

3. Complete assimilation
   cupboard

4. Coalescent assimilation
   this year; would you...; set you up
## Assimilation

### When fricatives are followed by /j/  

<table>
<thead>
<tr>
<th>$p_1$</th>
<th>$p_2$</th>
<th>$p_3$</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/</td>
<td>/ʃ/</td>
<td></td>
<td>this year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>miss you</td>
</tr>
<tr>
<td>/z/</td>
<td>/ʒ/</td>
<td></td>
<td>How is your day?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>He loves you.</td>
</tr>
<tr>
<td>/t/ or /ts/</td>
<td>/ʃ/</td>
<td>/ʃ/</td>
<td>next year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>last year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Who set you up?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>That’s your problem.</td>
</tr>
<tr>
<td>/d/ or /dz/</td>
<td>/ʒ/</td>
<td>/ʒ/</td>
<td>Did you do that?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>What would you do?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>My dad’s your partner.</td>
</tr>
</tbody>
</table>
1. The most reliable thing for a listener to detect is that a stressed syllable frequently has a longer vowel than that same vowel would be if it were unstressed.

2. Stress can always be defined in terms of something a speaker does in one part of an utterance relative to another.

3. A stressed syllable is often, but not always, louder than an unstressed syllable.

4. A stressed syllable is usually, but not always, on a higher pitch.
Example 1

'John or 'Mary should 'go.
'I think 'John 'and 'Mary should 'go.

an 'insult, to in'sult
an 'overflow, to over'flow
an 'increase, to in'crease

a 'walkout, to 'walk 'out
a 'put-on, to 'put 'on
a 'pushover, to 'push 'over

a 'hot dog,
a 'hot 'dog

I’ll de'fer to your opinion
I’ll 'differ from your opinion
Example 2

<table>
<thead>
<tr>
<th>diplomat</th>
<th>diplomacy</th>
<th>diplomatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>photograph</td>
<td>photography</td>
<td>photographic</td>
</tr>
<tr>
<td>monotone</td>
<td>monotony</td>
<td>monotonic</td>
</tr>
</tbody>
</table>
1. That’s what I thought.

2. So what did you dream?

3. I thought it was good.

4. He’s lazy and crazy and stupid.

5. If he can then there’s no argument about it.
1. The best way to decide whether a syllable is stressed is to try to tap out the beat as a word is said. This is because it is always easier to produce one increase in muscular activity—a tap—exactly in time with an existing increase in activity. When as listeners we perceive the stresses that other people are making, we are probably putting together all the cues available in a particular utterance in order to deduce the motor activity (the articulations) we would use to produce those same stresses. It seems as if listeners sometimes perceive an utterance by reference to their own motor activities. When we listen to speech, we may be considering, in some way, what we would have to do in order to make similar sounds.

2. Example: Tap out the beat

In a dialogue 📻
Stress

Tap out the beat

Time (s)
0 1.29172
0
5000

Time (s)
0 1.29686
0
5000

Time (s)
0 1.29326
0
5000

Time (s)
0 1.34813
0
5000

Frequency (Hz)
0
5000
The functions of stress

1. A stress can be used simply to give special emphasis to a word (new information) or to contrast one word with another.
   Example:
   A: 'John or 'Mary should 'go
   B: 'I think 'John 'and 'Mary should 'go.

2. Another major function of stress in English is to indicate the syntactic relationships between words or parts of words. For instance, there are noun-verb oppositions, such as "an 'insult, to in'sult"; there are a compound as a noun, e.g., "a 'hot dog" (a form of food), and an adjective followed by a noun, as in the phrase "a 'hot 'dog" (an overheated animal).
The degree of stress

1. In some longer words, it might seem as if there is more than one degree of stress. For example, say the word “psycho-lingistics” and try to tap on the stressed syllables. You will find that you can tap on the first and the fourth syllables of "psycho-lin'guistics." The fourth syllable seems to have a higher degree of stress.

2. Try saying a sentence such as "The 'psycholin'guistics 'course was 'fun." If you tap on each stressed syllable, you will find that there is no difference between the first and fourth syllables of "psycholinguistics." If you have a higher degree of stress on the fourth syllable in "psycholinguistics," this word will be given a special emphasis, as though you were contrasting some other psychology course with a psycholinguistics course.

3. Other examples:
   - fourteen, fifteen, sixteen
   - She’s only sixteen.
The words in both columns have the stress on the first syllable. The words in the first column might seem to have a second, weaker, stress on the last syllable as well, but this is not so. The words in the first column differ from those in the second by having a full vowel in the final syllable. This vowel is always longer than the reduced vowel—usually [ə]—in the final syllable of the words in the second column. The result is that there is a difference in the rhythm of the two sets of words. This is due to a difference in the vowels that are present; it is not a difference in stress.

Three-syllable words exemplifying the difference between an unreduced vowel in the final syllable (first column) and a reduced vowel in the final syllable (second column).

- 'multiply
- 'regulate
- 'copulate
- 'circulate
- 'criticize
- 'minimize

- 'multiple
- 'regular
- 'copula
- 'circular
- 'critical
- 'minimal
In the words of more than four or more syllables, there might be more than one stressed syllable. However, there is always one intonation peak for those words with many syllables.

- explain, explanation, exploit, exploitation,
- postman, bacon, gentleman,
- mailman, moron, superman
1. Loss of /h/ sound
   ask him
   did he
2. Loss of /ə/ sound
   tell them
   something
3. Loss of /t/ or /d/ before /ən/
   sudden
   sentences
4. Loss of a syllable
   family; temperature; camera; potato; etc.
1. Loss of /h/ sound
   ask him
   did he
2. Loss of /ə/ sound
   tell them
   something
3. Loss of /t/ or /d/ before /ən/
   sudden
   sentences
4. Loss of a syllable
   family; temperature; camera; potato; etc.
A syllable may be especially prominent because it accompanies a peak in the intonation. We will say that syllables of this kind have a tonic stress. Given this, we can note that English syllables are either stressed or unstressed. If they are stressed, they may or may not be the tonic stress syllables that carry the major pitch change in the tone group. If they are unstressed, they may or may not have a reduced vowel.

**FIGURE 5.1** Degrees of prominence of different syllables in a sentence.
Tonic stress

Examples

Intonation Peak
Stress Segments

↑  ↑  ↑  ↑

ex'plain  'explanation  exploit  'exploitation
[ɪkspleɪn  ɪkspleɪnəʃən  ɪkspləʊɪt  ɪksploɪteɪʃən]

**TABLE 5.4**
The combination of stress, intonation, and vowel reduction in a number of words.

<table>
<thead>
<tr>
<th></th>
<th>explain</th>
<th>explanation</th>
<th>exploit</th>
<th>exploitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>tonic accent</td>
<td>− − +</td>
<td>− − + −</td>
<td>− +</td>
<td>− − + −</td>
</tr>
<tr>
<td>stress</td>
<td>− +</td>
<td>+ − + −</td>
<td>− +</td>
<td>− + + −</td>
</tr>
<tr>
<td>full vowel</td>
<td>− +</td>
<td>+ − + −</td>
<td>− +</td>
<td>+ + + −</td>
</tr>
</tbody>
</table>
1. The stresses that can occur on words sometimes become modified when the words are part of sentences. The most frequent modification is the dropping of some of the stresses. (CD 5.7)

'Mary's younger 'brother wanted 'fifty chocolate 'peanuts.

2. As a general rule, English tries to avoid having stresses too close together. Very often, stresses on alternate words are dropped in sentences where they would otherwise come too near one another.

3. The 'big brown 'bear bit 'ten white 'mice.
The tendency to avoid having stresses too close together may cause the stress on a polysyllabic word to be on one syllable in one sentence and on another in another sentence.

1. Consider the word "clarinet" in "He had a 'clarinet 'solo" and in "He 'plays the clari'net." The stress is on the first or the third syllable, depending on the position of the other stresses in the sentence.

2. Similar shifts occur in phrases such as "'Vice-president 'Jones" versus "'Jones, the vice-'president."

3. Numbers such as "14, 15, 16" are stressed on the first syllable when counting, but not in phrases such as "She's 'only six'teen."
Tonic stress

Try tapping on the indicated syllables while you read the next paragraph.

'Stresses in 'English 'tend to re'cur at 'regular 'intervals of 'time. ( ' ) It's 'often 'perfectly 'possible to 'tap on the 'stresses in 'time with a 'metronome. ( ' ) The 'rhythm can 'even be 'said to de'termine the 'length of the 'pause between 'phrases. ( ' ) An 'extra 'tap can be 'put in the 'silence, ( ' ) as 'shown by the 'marks with'in the pa'rentheses. ( ' )

She 'wanted a 'pretty 'parrot.
My 'aunt wanted 'ten pretty 'parrots.
The 'unknown 'man
The 'man is un'known.

Speed, speedy, speedily
The 'red 'bird flew 'speedily 'home.
1. Stresses tend to recur at regular intervals. But the sound pattern of English does not make this an overriding necessity, adjusting the lengths of syllables so as to enforce complete regularity. The interval between stresses is affected by the number of syllables within the stress group, by the number and type of vowels and consonants within each syllable, and by other factors such as the variations in emphasis that are given to each word.

Examples:

- She 'wanted a 'pretty 'parrot.
- My 'aunt wanted 'ten pretty 'parrots.

2. However, not all sentences are as regular as what we have seen. Saying that stresses tend to recur at regular intervals does not mean that there is always an equal interval between stresses in English. It is just that English has a number of processes that act together to maintain the rhythm. (See p. 116)
Within the intonational phrase, each stressed syllable has a minor pitch increase; but there is usually a single syllable that stands out because it carries the major pitch change. A syllable of this kind is called the tonic syllable (marked with an “*”).
If I were telling someone a number of facts about lions, I might say the sentence (4). In discussion of mammals, sentence (5) tells that a lion fits into this category.

(4) *A lion is a *mammal.*

(5) *A *lion is a *mammal.*
Yes-no questions

(6) Will you 'mail me my *money?

(7) Will you *mail me my 'money?
Wh-questions

(8) When will you mail me my *money?
The expression with coordinators

(10) We knew 'Anna, 'Lenny, 'Mary, and *Nora.
The questions with “or not”

(11) Will you ‘mail me my ‘money or *not?
Sometimes there are two or more intonational phrases within an utterance. The beginning of a new intonational phrase may be marked, as in (3), by ‖.

(3) ’When we came ‘in, | we had *dinner.”
The complex sentence

(9) 'When you are *winning, | I will run away.
I hear you, please continue.

Did you say “yes”? 

Tonic stress

The continuation rise

(12) Yes.

(13) Go on.

(14) Yes?

(15) Go on?
The low pitch as a tonic syllable

(16) *mom will marry a 'lawyer?
Meanings

The meanings and the contours

(17) *Laura* (statement of the name);

(18) *Laura* (addressing Laura);

(19) *Laura* (calling from a distance)
1. In general, **new information** is more likely to receive a tonic accent than material that has already been mentioned.

2. The **topic** of a dialogue.

3. However, the topic of a sentence is less likely to receive the tonic accent than the **comment** that is made on that topic.

4. **Contrasting** elements

5. **Emphasized** materials
These curves show different pronunciations of the name "A'melia."

(20) is a simple statement, equivalent to "Her name is Amelia."

(21) is the question, equivalent to "Did you say Amelia?"

(22) is the form with the continuation rise, which might be used when addressing Amelia, indicating that it is her turn to speak.

(23) is a question expressing surprise, equivalent to "Was it really Amelia who did that?"

(24) is the form for a strong reaction, reprimanding Amelia.
One system for representing pitch changes is known as **ToBI**, standing for **Tone and Break Indices**. In this system, target tones $H^*$ and $L^*$ (called H star and L star) are typically written on a line (called a tier) above the segmental symbols, and put immediately above the stressed syllables. A high tone, $H^*$, can be preceded by a closely attached low pitch, written $L + H^*$, so that the listener hears a sharply rising pitch. Similarly $L^*$ can be followed by a closely attached high pitch, $L^* + H$, so that the listener hears a scoop upward in pitch after the low pitch at the beginning of the stressed syllable.
There are therefore six possibilities, shown in Table 5.5, that can be regarded as the possible pitch accents that occur in English.

<table>
<thead>
<tr>
<th>Optional Pre-nuclear Pitch Accents on Stressed Syllables</th>
<th>Nuclear Pitch Accent</th>
<th>Phrase Accent</th>
<th>Boundary Tone</th>
</tr>
</thead>
<tbody>
<tr>
<td>H*</td>
<td>H*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L*</td>
<td>L*</td>
<td>L−</td>
<td>H%</td>
</tr>
<tr>
<td>L + H*</td>
<td>L + H*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L* + H</td>
<td>L* + H</td>
<td>L−</td>
<td>H%</td>
</tr>
<tr>
<td>H + !H*</td>
<td>H + !H*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(!H*)</td>
<td>(!H*)</td>
<td>H−</td>
<td>L%</td>
</tr>
</tbody>
</table>

The ToBI system for characterizing English intonations. Each intonational phrase (tone group) must have one item from each of the last three columns, and may also have additional pitch accents marked on other stressed syllables, as shown in the first column. The parenthesized accent, (!H*), will be explained at the end of this section.
(20) A'melia.
Simple statement in response to
“What is her name?”

(21) A’melia?
A question, equivalent to
“Did you say Amelia?”

(22) A’melia—
Addressing Amelia, indicating
that it is her turn to speak.

(23) A’melia!?
A question indicating surprise.

(24) A’melia!!
A strong reaction, reprimanding Amelia.
(1) *We know the new mayor.*
Simple statement.

(6) *Will you 'mail me my 'money?*
Simple yes/no question.

(9) *When you are 'winning, 'I will run a'way.*
Two clauses with a break index of 4
The pitch in most sentences has a tendency to *drift down*. Earlier, when discussing stress, we considered the sentence "Mary's younger brother wanted fifty chocolate peanuts," with stresses on alternate words, "Mary's," "brother," "fifty," and "peanuts." If you say this sentence with these stresses, you will find that there is an H* pitch accent on each of the stressed syllables, but each of these high pitches is usually a little lower than the preceding high pitch. This phenomenon is known as **downdrift**.

\[
\begin{align*}
[H^* & !H^* !H^* !H^* L–L\%] \\
\text{(25) Mary’s younger brother wanted fifty chocolate peanuts.}
\end{align*}
\]

Cf.

\[
\begin{align*}
[H^* H^* !H^* !H^* L–L\%] \\
\text{(26) Mary’s younger brother wanted fifty chocolate peanuts.}
\end{align*}
\]
(25) Mary’s younger brother wanted fifty chocolate peanuts.
Mary’s younger brother wanted fifty chocolate peanuts.

\[ [\text{H}^* \quad \text{H}^* \quad !\text{H}^* \quad !\text{H}^* \text{L–L\%}] \]

(26) Mary’s younger brother wanted fifty chocolate peanuts.
The ToBI system is a way of characterizing English intonation in terms of a limited set of symbols—a set of six possible pitch accents including a downstep mark, two possible phrase accents, two possible boundary tones, and four possible Break Indices, going from 1 (close connection) to 4 (a boundary between intonation phrases). It was designed specifically for English intonations, but, with a few modifications, it may be appropriate for other languages as well.
Thank you!

Any questions, please?